What is Claimed is:

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1. A method for fabricating a capacitor for an integrated circuit, comprising the following steps:

a) interposing a diffusion barrier layer between a substrate contact and a conductive oxidation resistant layer, at least said diffusion barrier layer and said conductive oxidation resistant layer forming a first electrode of said capacitor; and

b) encompassing sidewalls of said diffusion barrier layer with an insulative layer, said insulating layer prohibited from overlying and underlying said diffusion barrier layer.

2. The method as specified in Claim 1, further comprising the following steps:

a) depositing a dielectric layer overlying said conductive oxidation resistant layer;

b) performing a high temperature anneal;

c) preventing oxidation of said barrier layer during said step of performing; and

d) depositing a second electrode overlying said dielectric layer, said dielectric layer electrically insulating said first and said second electrodes one from the other.

3. The method as specified in Claim 2, further comprising:

a) forming a plurality of said capacitors having said first and said second electrodes; and

b) providing electrical communication between said second electrodes of said plurality.

4. The method as specified in Claim 1, wherein said step of encompassing said sidewalls comprises depositing said insulative layer to overly said substrate, wherein said

insulative layer is selected from a group of insulative materials comprising oxide, nitride and oxynitride.

5. The method as specified in Claim 1, wherein said step of encompassing said sidewalls comprises:

a) depositing a first portion of said insulative layer to overly said substrate; and

b) depositing a second portion of said insulative layer to overly said first portion, said second portion having oxidation resistant properties.

6. The method as specified in Claim 5, further comprising planarizing said first portion.

7. A method for forming a capacitor, comprising the following steps:

a) forming a first capacitor electrode overlying a substrate contact;

b) forming a dielectric layer overlying said first electrode;

c) performing a high temperature anneal;

d) preventing oxidation of said first electrode during said high temperature anneal; and

e) forming a second electrode, wherein said dielectric layer electrically insulates said first and said second electrodes.

8. The method as specified in Claim 7, further comprising increasing a capacitance of said capacitor by selecting said dielectric material from a group of materials having a dielectric constant greater than 50, wherein said group comprises $Ba_xSr_{(1-x)}TiO_3$, $BaTiO_3$, $SrTiO_3$, $PbTiO_3$, $Pb(Zr,Ti)O_3$, $(Pb,La)(Zr,Ti)O_3$, $(Pb,La)TiO_3$, KNO_3, and $LiNbO_3$.

9. A method for fabricating a capacitor, comprising the following steps:

a) depositing a thick insulative layer overlying a substrate;

b) forming an opening in said insulative layer in order to expose said substrate;

c) forming a conductive plug in said opening, said conductive plug forming a first portion of a first electrode of said capacitor;

d) providing a recess in said opening between a surface of said insulative layer and a surface of said conductive plug;

e) forming a conductive barrier layer, for preventing diffusion, in said recess such that said barrier layer is surrounded on sidewalls by said insulative layer, said barrier layer overlying said conductive plug and forming a second portion of said first electrode;

f) forming a conductive oxidation resistant layer overlying said barrier layer to form a third portion of said first electrode;

g) forming a dielectric layer overlying said oxidation resistant layer; and

h) forming a second electrode overlying said dielectric layer, said dielectric layer electrically insulating said first and said second electrodes one from the other.

10. The method as specified in Claim 9, wherein said step of forming said dielectric layer comprises the following steps:

a) applying temperatures capable of oxidizing said barrier layer; and

b) preventing said barrier layer from oxidizing during said step of applying.

11. The method as specified in Claim 9, further comprising the step of planarizing said insulative layer prior to forming said conductive plug.

12. The method as specified in Claim 9, wherein said step of forming said conductive plug comprises depositing polysilicon to fill said opening.

13. The method as specified in Claim 12, wherein said step of providing said recess comprises etching back a portion of said polysilicon to create said recess in said thick insulative layer.

14. The method as specified in Claim 12, wherein said step of forming said conductive plug comprises planarizing said polysilicon to expose said insulative layer.

15. The method as specified in Claim 14, further comprising the step of performing a chemical mechanical planarization to effect said step of planarizing.

16. The method as specified in Claim 12, wherein said step of forming said conductive plug comprises etching back said polysilicon to expose said insulative layer.

17. The method as specified in Claim 9, wherein said step of forming said conductive plug comprises selectively growing silicon in said opening.

18. The method as specified in Claim 17, wherein said step of providing said recess comprises prohibiting said step of selectively growing silicon in said recess.

19. The method as specified in Claim 9, wherein said step of forming said thick insulative layer comprises the following steps:

a) depositing a first portion of said insulative layer to overly the substrate; and

b) depositing a second portion of said insulative layer to overly said first portion, said second portion capable of prohibiting oxygen penetration.

20. The method as specified in Claim 9, wherein the step of forming said dielectric layer comprises forming said dielectric layer with a material typified as having a high dielectric constant.

21. The method as specified in Claim 9, wherein the step of forming said barrier layer comprises forming said barrier layer with tantalum.

22. The method as specified in Claim 9, wherein the step of forming said oxidation resistant layer comprises forming said oxidation resistant layer with platinum.

23. The method as specified in Claim 9, wherein the step of forming a barrier layer comprises:

a) sputtering tantalum to overly said conductive plug and said thick insulation layer; and

b) removing portions of said tantalum to exposes said thick insulative layer while retaining said tantalum in said recess.

24. The method as specified in Claim 23, wherein said step of removing comprises performing a chemical mechanical planarization.

25. The method as specified in Claim 9, wherein said step of forming said second electrode comprises sputtering platinum to overly said dielectric layer.

26. The method as specified in Claim 9, wherein said step of forming said dielectric layer comprises depositing by chemical

vapor deposition a high dielectric material from the group of materials comprising $Ba_xSr_{(1-x)}TiO_3$, $BaTiO_3$, $SrTiO_3$, $PbTiO_3$, $Pb(Zr,Ti)O_3$, $(Pb,La)(Zr,Ti)O_3$, $(Pb,La)TiO_3$, KNO_3, and $LiNbO_3$.

27. The method as specified in Claim 9, wherein the step of depositing said thick insulative layer comprises depositing a material selected from the group comprising oxide, nitride, and oxynitride.

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